Abstract

A universal manifold holding fixture for holding intake manifolds from v-type engines that establishes and maintains a centerline alignment with respect to the intake manifold and a centering shaft; said centering shaft is configured to be receivable into various machining tools. The fixture is adjustable in three axes and configurable to accommodate intake manifolds from various manufacturers. The fixture also maintains the intake manifold in isometric tension thus simulating actual service conditions. The fixture provides engine machinists with a solution to handling large, heavy, and unwieldy intake manifolds while machining the manifold surfaces.